

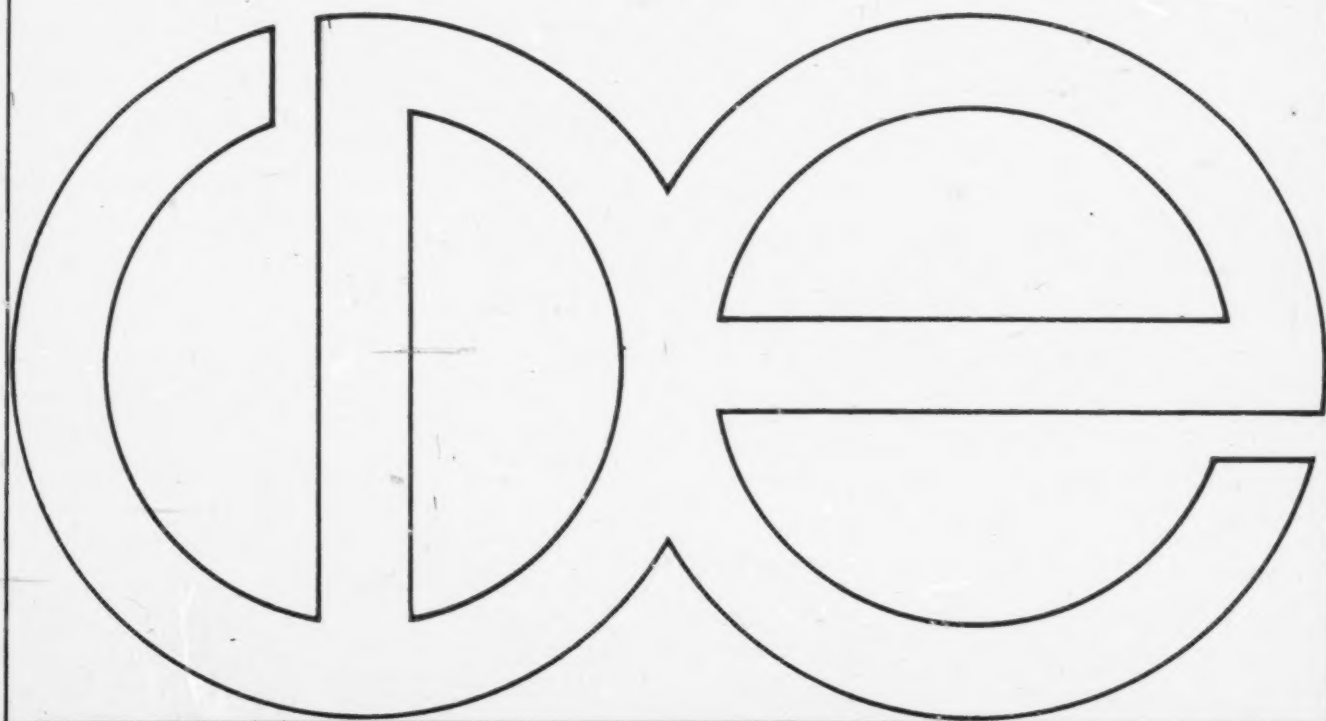
Center For Demography And Ecology

University of Wisconsin-Madison

METROPOLITAN AND NONMETROPOLITAN GROWTH DIFFERENTIALS IN THE UNITED STATES SINCE 1980

Calvin L. Beale and Glenn V. Fuguitt

CDE Working paper 85-6



METROPOLITAN AND NONMETROPOLITAN GROWTH DIFFERENTIALS
IN THE UNITED STATES SINCE 1980

Calvin L. Beale
Economic Research Service
U.S. Department of Agriculture
Washington, D.C.

Glenn V. Fuguitt
Department of Rural Sociology
University of Wisconsin
Madison, Wisconsin

An earlier version of this paper was prepared for Session F.11, Urban Population Growth and its Economic and Social Consequences, at the General Conference of the International Union for the Scientific Study of Population, Florence, Italy, June 5-12, 1985.

This research has been supported by the College of Agricultural and Life Sciences, University of Wisconsin-Madison and by the Agricultural and Rural Economics Division, U.S. Department of Agriculture, through a cooperative agreement, and by the Center for Demography and Ecology, University of Wisconsin-Madison through a grant from the Center for Population Research of the National Institute of Child Health and Human Development (P30 HD05876).

METROPOLITAN AND NONMETROPOLITAN GROWTH DIFFERENTIALS SINCE 1980

ABSTRACT

All through the 1970-80 decade, growth of population took place in the rural and small town areas of the United States, where very little had occurred in earlier recent decades. In general, the trend can be viewed as one that was primarily socially motivated but facilitated by improved rural economic conditions. By contrast, in the first three years of the 1980s nonmetropolitan growth diminished to an annualized rate only about three-fifths as high as that of the 1970s, whereas metropolitan growth has continued its previous pace. Although the force of the agricultural and industrial recession of 1980-83 in nonmetropolitan areas produced much of this change, nonmetropolitan counties with previous growth linked to retirement (and thus protected from income decline) have similarly slowed their rate of growth. It is conceivable, therefore, that the strength of the noneconomic, quality-of-life objectives that attracted people to rural and small town communities in the 1970s may have waned. Therefore, further economic recovery in these areas may not lead to a full resumption of the pattern of population growth found in the 1970s.

METROPOLITAN AND NONMETROPOLITAN GROWTH DIFFERENTIALS IN THE UNITED STATES SINCE 1980

THE NONMETROPOLITAN TURNAROUND

One of the most noted but unforeseen trends in the United States during the 1970s was the revival of population growth in the rural and small town parts of the country. Throughout the 20th Century and most of the 19th Century as well, urban and/or metropolitan areas had the highest growth rates. Especially since the farm population reached its peak during World War I, it had been the common experience of a majority of rural counties to have net outmovement of people. And, in hundreds of counties in any decade from 1920 to 1970, this outmovement exceeded the excess of births over deaths, therefore resulting in population decline. It is not an exaggeration to suggest that experience of rural demographic decline or comparative stagnation was so prevalent and prolonged that it became axiomatic to expect a continuance of this condition. Acceptance of the established trend was so uncritical that there was little adumbration in the demographic literature of the late 1960s of the major change that was starting.

From the very beginning of the 1970s, nonmetropolitan counties began to increase in population collectively at a higher rate than the metropolitan counties. This trend continued throughout the decade, and for the period 1970-to-1980 as a whole, the nonmetropolitan growth rate of 14.4 percent was well above that of 10.5 percent in metropolitan areas (Table 1). By contrast, in the 1960s, the nonmetropolitan rate of increase had been less than one sixth as high as that in metropolitan areas, 2.5 percent vs. 17.2 percent. Several factors seem to have combined to bring about this dramatic change:

1. During the 1970s there was a major slackening in the exodus from agriculture. Farm employment had dropped by 2 million in the 1960s, but stabilized in the 1970s, falling by only .1 million.
2. There was major growth of other employment in nonmetropolitan America during the decade. Decentralization of manufacturing continued a trend begun in the 1960s. Jobs in professional services rapidly expanded (especially in health and education), and mining revived (spurred largely by the energy crisis).
3. The growing function of many rural areas as recreation and/or retirement communities was notable. This trend was evident in the 1960s, but accelerated in the 1970s.
4. Both survey and anecdotal evidence make it clear that many thousands of people either remained in or moved to rural and small town areas primarily for noneconomic, quality of life reasons. Even though the average family income in nonmetropolitan areas has been about a fifth less than that in metropolitan areas, there was strong sentiment for the "simpler" life, expressed either in terms of negative perceptions of life in the large cities and their suburbs, or positive conceptions of the merits of living in smaller communities.

5. Greater residential sprawl around metropolitan areas took many people into communities that were rural in character and nonmetropolitan in official status, but that were accessible to metropolitan jobs and services for those tolerant of longer-distance commuting.

THE POST-1980 TREND

In the latter part of the 1970s, however, nonmetropolitan growth began to slow down (Richter 1985) and post-1980 population estimates revealed a re-reversal of the growth differential between metropolitan and nonmetropolitan areas. This is seen by aggregating county growth estimates for 1983, with the resulting 1980-83 population change for metropolitan areas at 3.5 percent, which is above the nonmetropolitan change of 2.7 (table 1). Because of the different time intervals involved, results for the 1960-1983 time span are given in Figure 1 using annualized rates per 1000.¹ Comparing the three time periods shows that overall between 1970-80 and 1980-83 the metropolitan figure increased slightly and the nonmetropolitan declined. Nevertheless, the most recent nonmetropolitan trend is at an intermediate level between the older traditional pattern and the surprising rapid growth phase of the 1970s.

It should be stressed that the return of nonmetropolitan United States to a pattern of slower growth is not a reversion to the pell-mell exodus to the cities that typified the 1940s, 1950s, and early 1960s. In the 1950s alone, net outmigration to metropolitan areas totaled 5.5 million people. In the same decade, fully 30 percent of the outmovement consisted of Blacks making an historic one-time migration out of hand-labor tenant agriculture to the cities. This movement was so complete that today less than 6 percent of nonmetropolitan Blacks work solely or primarily in agriculture, either as

farmers or hired workers.

Although total demographic growth in the nonmetropolitan United States was considerably reduced in 1980-83, there was no overall net outmigration. National nonmetropolitan growth was about equal to natural increase. An increasingly major feature of American demography is the existence of substantial net immigration from abroad. The recent difference between the rate of metropolitan and nonmetropolitan growth is essentially the contribution of immigration. Immigrants go disproportionately to metropolitan areas, notwithstanding the well-publicized presence of foreign workers--both legal and illegal--among farm workers on large-scale farms in the West.

Another major trend of the 1960s and the 1970s was the overall decline in growth levels in the Northeast and North Central states in contrast to increasing or continued high growth levels in the South and the West. As was true in other recent decades, the current national growth level conceals a wide range of regional diversity, with hundreds of counties continuing to have net immigration--particularly in the West--while others decline in the face of current industrial and agricultural reality. The metropolitan-nonmetropolitan change pattern described above is rather different when considered separately for the four census regions in table 2. The turnaround is clearly seen for the Northeast and North Central states with a considerable decline in metro growth and increase in nonmetro growth between the 1960-70 and 1970-80 periods. Although nonmetro growth is lower and metro growth is higher for 1980-83 than for 1970-80, the nonmetropolitan category is still growing twice as rapidly as the metropolitan in the Northeast. Overall growth in both residence categories is essentially zero, however, in the North Central states. On the other hand, although in the South nonmetropolitan population grew considerably faster in the 1970s and the early 1980s than in the 1960s, the metropolitan population grew even more rapidly for each period. (Note

that a constant 1983 definition of metropolitan is used here, but the results are similar using other definitions or combinations of definitions.)

Similarly, in the West the nonmetropolitan population grew more than twice as rapidly in the 1970s and 1980s as in the 1960s, and continued to be higher than metropolitan growth in the early 1980s. The most rapidly growing segment in the whole table for 1980-83 is the nonmetropolitan West. So we see that with a disaggregation by Census region, no region experienced a reversal of the turnaround! Rather, nonmetro growth continued to be faster than metro in the Northeast and West, metro growth continued to be faster than nonmetro in the South, and post-1980 metro and nonmetro growth were essentially equal and less than 1.0 per 1000 for both residence categories in the North Central States.

This rather peculiar result underscores the need to be very cautious about generalizations concerning overall metropolitan-nonmetropolitan growth comparisons. After all, both metropolitan and nonmetropolitan areas are quite heterogeneous, and the fact that one such category is higher than the other is perhaps not as significant as the changes in growth patterns that are taking place within the metropolitan and nonmetropolitan sector. Consequently, the remainder of this paper is concerned with possible explanations for the recent decline in nonmetropolitan growth and gain in metropolitan growth, differentiating counties by location and other characteristics.

COUNTY GROWTH PATTERNS

Although a definitive explanation for the decline in nonmetropolitan growth is not yet available, a number of recent events no doubt contributed to this change in the trend. As the decade of the 1970s ended, the country went into the worst economic slump since that of the 1930s. For reasons that are

partly but not fully clear, the nonmetropolitan economy was more seriously affected in the early 1980s than the metropolitan economy. Employment in timber industries dropped as housing construction declined. Many rural manufacturing plants were linked with the dwindling automotive and steel industries. And the recently revived mining industry underwent severe depression in mining of metal ores and lesser contraction in coal mining. Further, in the textile, clothing, and leather industries that have have a large nonmetropolitan base there has been increasing competition and job loss from lower priced imports.

The result was a greater rise in unemployment in rural and small town areas than in cities and suburbs. The nonmetropolitan areas were also more heavily hurt by shortened work weeks (involuntary part-time work), and showed a higher percentage of workers who dropped out of the official labor force, because of discouragement and belief that there was no point in looking for jobs. In addition, the farm economy suffered badly in the early 1980s. Overproduction and weak markets in 1980-84 drove the annual net income of farm operators from farm sources down to less than half the average level of the 1970s, adjusting for changes in the value of the dollar (Economic Research Service 1984. The measure of farm income used is returns to operators plus net rental of land to others.) This made it impossible for some commercial farmers to continue in business, and seriously depressed general business conditions in agriculturally-dependent areas.

From 1980-83, there were many more declining counties in the central and Southern Corn Belt than there had been in the 1970s (compare Map 2 with Map 1). In our judgment, this change reflects the agricultural crisis and the low purchasing power of farmers in those years, plus stagnation in the older metal

goods and automotive industrial economy that coexists with farming in many parts of this area. Numerous other new or renewed areas of population decline include the industrially-based Ohio Valley, some of the timber industry areas of the Pacific Northwest, and certain mining counties of the West.

On the other hand, a good many of the small agricultural counties of the western part of the Great Plains that lost people in the 1970s are estimated to have had some increase in the early 1980s. The source of this growth is not clear. Some of the affected counties can be shown to have had oil or gas development that would offset agricultural loss, but in most cases this is not so. Many of these counties have populations of only 1,000-6,000 people and their trend cannot be estimated with as much reliability as that in larger areas. However, their number (more than 100 counties) is too large to make estimating difficulties a tenable explanation for the general phenomenon. What is evident is that with few exceptions the newly growing counties are west of the Corn Belt in a region dominated by wheat and cattle agriculture that experienced less farm income loss than did the Corn Belt counties that have had either continued or renewed population decline.

The newly losing nonmetropolitan counties of the Corn Belt and elsewhere are more than twice as large in average population as the newly gaining counties found mostly in the Great Plains (bottom line of table 3). As a result, the percentage of the nonmetropolitan population that lives in areas with economic opportunities so inadequate as to induce net population loss has more than doubled since the 1970s. In 1970, 12.5 percent of the nonmetropolitan population was in counties that declined in the following decade. In 1980, 28 percent of nonmetropolitan people lived in counties that have decreased in size since then. The average annual rate of loss in declining rural and small town areas, however, is no greater than it was in

the 1970s, but the size of the populations involved in such loss is much larger. (The above results are seen in Table 3 by comparing the corresponding numbers in the first and second panels for column 3.)

On the metropolitan side the newly losing counties are only one fourth the size of the newly gaining counties on an average, due primarily to the shift of 13 major metro counties from decline to growth. Of these, five have more than 750,000 population: Cook, Illinois; Marion, Indiana; Queens, New York; Hennepin, Minnesota; and Hartford, Connecticut. Together the newly growing metropolitan counties were only gaining at an annualized rate of 2.8 per 1000, but they were more than 12 percent of the residence group, while the newly declining counties were only 7 percent of the residence group (compare columns 2 and 5 of the third panel). The metropolitan population residing in declining counties thus dropped from 34 to 24 percent in comparing the 1970s with the early 1980s according to the second column of table 2.

AGRICULTURAL AND RETIREMENT COUNTIES

If nonmetropolitan counties are ranked by the percentage of employed people engaged solely or primarily in agriculture in 1980, those counties with 20 percent or more so employed (and thus dominated by agriculture) had an aggregate annualized population growth rate of 0.8 per 1000 for 1980-83, with slightly more than half of the counties declining. Those with less concentration in agriculture had an overall annualized growth rate of 9.1 per 1000.

In the 1970s, counties that could be identified as retirement areas were far and away the most rapidly growing class of nonmetropolitan areas. About 500 counties had net growth from immigration of the population 60 and over in 1980 of at least 15 percent during the 1970-80 decade. This was a fifth of

all nonmetropolitan counties. Retirement migration is no longer a matter of moving to the semi-tropical climates of Florida, Arizona, or southern California. Although the "Sun Belt" is still favored, 46 of the 50 States had nonmetropolitan retirement counties, if the above criterion is used. Many of these counties have natural lakes, dam reservoirs, or are coastal. Many are in scenic mountain areas--the Blue Ridge Mountains, the Ozark hills, or the Sierra Nevada foothills. Others are in the desert Southwest.

Over the last two decades, the income levels of older people have been steadily improved and protected against inflation by better pension systems and Federally supported medical care. Most older people do not migrate. Typically only 2 percent of persons aged 55 and over move across county lines in any year--the lowest rate for any age group. But, the direction of the movement that does take place is sufficiently toward smaller-scale communities that it has become a major factor in nonmetropolitan growth. We estimate (through life table survival rates) that the retirement counties noted above had about 750,000 net inmovement of persons during the 1970s who were 60 years old or more in 1980.

These counties had an annualized growth rate of 28.3 per 1000 in that decade, a rate almost three times that of other nonmetropolitan counties (Table 4). Their growth in most cases was not limited to older people. Often the retirement counties are also general resort and recreation areas that attract people of other ages. Since 1980, nearly 95 percent of the retirement counties have continued to have population growth. Some have had industrial slumps that have more than offset any retirement-related increase, but the group as a whole grew by 18.3 per 1000 on an annualized basis from 1980-83.

There would seem to be two equally important points to make: first, the growth is more than treble that in nonretirement settings, and the

differential between retirement and non-retirement counties has increased slightly. But, secondly, the rate on an annualized basis is well below that observed in the 1970s. The larger question is whether the impetus of noneconomic motivations for settlement in nonmetropolitan areas has subsided, for this in our view was the most important single factor leading to the large scale and pervasive character of the 1970s turnaround phenomenon. Retirement areas presumably should have been least affected by the severe business recession of 1980-83, because of their heavy dependence on people whose pension income was immune to the business cycle. Since these areas showed almost the same degree of downturn in population growth as did other nonmetropolitan counties during the recession, then it may be true that the strength of the attitudes and values that impelled many people to seek rural and small town living for quality-of-life reasons has waned, at least for the moment.

METROPOLITAN GROWTH DIFFERENTIALS

The persistence of metropolitan population growth during the early 1980s at a pace equal to that of the 1970s is largely attributable to modest increased growth or decreased decline in the core counties of major metropolitan areas. Figure 2 shows metropolitan counties classed by size of SMSA in 1983, with the largest ones, having more than one million inhabitants, further subdivided by whether they include all or part of the central city or cities ("core") or not ("fringe"). The 1960s was a period of extremely rapid growth in the fringe counties of these large metropolitan areas. In contrast, for the 1970s these counties grew at about the same rate as the smaller-sized metropolitan area groups, and the major core counties dropped to almost no growth. This pattern was consistent with the nonmetropolitan turnaround in

showing less concentration into major metropolitan areas and, in fact, a small increase in growth for the counties of metropolitan areas having less than 250,000 people. The 1980-83 period saw an increase in growth for the core counties, but a further decline in rates of growth for all other metropolitan categories, though this decline was less than for nonmetropolitan areas overall.

The regional breakdown given previously (Table 2) indicated that the increase in the total metropolitan growth rate across the last two time periods was actually found only in the Northeast. A regional disaggregation of metropolitan counties indicates, however, that the increase in major core counties is found in each region (see Table 5), although for the Northeast and North Central states this is represented as a diminution of decline. Again, the considerable difference in growth between the Northeast and North Central on the one hand, and the South and West on the other hand is perhaps the most outstanding feature of this table across all metropolitan and nonmetropolitan categories, and for all three time periods. The increase in the overall metropolitan rate in the Northeast is attributable to a shift from -9 to -1 percent for core counties and from 4.5 to 5 percent for fringe counties, which outweighed the decline in growth for the smaller metro areas. All other regions experienced growth in core but decline in fringe and both smaller metro categories, and so the fact that their overall metropolitan rates did not increase must be due to the increase in core growth being outweighed by reduced growth in other SMSA counties' losses. If the metropolitan Northeast as a whole had experienced the slower growth rate of the 1970-80 period, total US metropolitan growth would have been about 9.5 percent rather than 10.5 percent over 1980-83.

The importance of the major core counties to the slight increase in metro

growth is seen by the fact that if one uses the slower 1970-80 growth rate for all core counties, the total metro growth would have been only 8.1, or about at the level of nonmetropolitan growth. The decline in growth in the major metropolitan centers during the 1970s has been viewed as partial evidence of a major urban crisis--perhaps most dramatically exemplified by the well-publicized near-bankruptcy of the New York City government that required Federal intervention in the middle of the decade. But this crisis seems to have moderated greatly. Several major cities have extensive highly regarded renovation efforts. These county estimates indicate a nation-wide resurgence in and immediately around the metropolises of the nation, although the level of growth is probably still not sufficient to offset natural increase and signal a net migration gain.

One subtle change particularly important for metropolitan areas, that has occurred in the United States in recent years, is an increasing concentration of population growth in just several States. In the 1970s, the three states of California, Florida, and Texas had 42 percent of the country's total population growth. Two of these States are very large physically; all have large areas of mid-to-warm winter climates; and all attract retirees and large numbers of newer immigrants (many illegal). Texas and California have large industrial bases driven by defense, electronic, and oil and gas industries, and California has its ineffable lifestyle qualities. In the 1980s, the three leaders acquired more than half (53 percent) of all population increase from 1980-83, although they had only 21 percent of the US population at the beginning of the decade.

This concentration trend is especially evident in metropolitan population growth, and only modestly so in nonmetropolitan increase. The three States obtained 59 percent of all metropolitan growth from 1980-83. They have such

major growth nodes as the greater Los Angeles area, San Diego, the San Francisco Bay area, Houston, Dallas-Ft. Worth, Miami, and the Tampa Bay area. However, they only captured 29 percent of nonmetropolitan growth, even though they did have the largest nonmetropolitan increase of any three States. Even this is a higher degree of nonmetropolitan concentration than that in the 1970s when only 16 percent of such growth was found in the top three States, but it is clear that rural and small town gains are much more diffuse than are metropolitan gains.

GROSS MIGRATION FLOWS

To complete this analysis, we review findings from another approach, based on a different data source. In March of each year, the Bureau of the Census asks direct questions on migration of a large national sample of the population. Among other dimensions, beginning in 1973 these data allow the tabulation of movers between metropolitan and nonmetropolitan areas. (Time intervals for migration of one through five years were used in the different annual surveys in the 1970s; a one-year interval was used for the 1981 through 1984 surveys.) One of the findings in the early 1970s, which helped to announce the turnaround, was that more domestic migrants were then moving into nonmetropolitan areas than leaving them (Bureau of the Census 1974).

Table 6 shows, however, that although this pattern held up across ten surveys using different time intervals between 1970 and 1982, it slowed down according to the comparable one-year interval surveys (compare 1975-76 with the surveys for the 1980-81 and 1981-82 periods), and the net direction of the flow was essentially balanced for 1982-83. Then a decided movement back into metropolitan areas of more than 300,000 occurred in 1983-84.

If one compares the two five-year intervals of 1970-75 and 1975-80, it

appears that a slowdown of the net balance favoring nonmetropolitan areas occurred after 1975. The same conclusion would be drawn comparing the four-year interval 1970-74 with 1975-79, but on a basis of the two three-year surveys, a slightly larger net flow favoring nonmetropolitan areas is found in the latter half of the decade--1975-78--than in 1970-73. These data are subject to sampling variation, but they indicate that the turnaround began slowing at least by 1978. This is consistent with the findings of Richter (1985) using annual county estimates of net migration. She found the annualized nonmetropolitan net migration rate per 1000 to be 8.8 in 1970-74, 9.2 in 1974-77, and 6.0 in 1977-80.

Throughout most of the 1970-84 period, young adults aged 20-29 continued to leave rural and small town communities for the cities and suburbs. The only exceptions are for the three surveys covering the interval from 1975 to 1978, which may be further evidence that the turnaround peaked at that time. In practice, the excess of departures to metropolitan areas probably began at age 18, the typical age of leaving high school. There was much movement in both directions, but presumably such factors as the need for higher education, the desire for a metropolitan life experience, or the search for a spouse sustained the traditional pattern of net flow throughout most of the period. At all other broad age groups, the net interchange was toward the nonmetropolitan communities until the very early 1980s, with the amounts fairly equally divided among children, adults 30-44 years of age, and those 45 years old and over.

One point that bears emphasis is the fact that even at the height of the rural turnaround from 1970-75, the overall probability that a nonmetropolitan resident would move away to a metropolitan area was greater than the probability of a move by a metropolitan resident to a rural or small town

community. The seeming anomaly that the residents of a population experiencing net inmovement should have the greater chance of outmovement is explained by the disparity in the size of the base populations. The surviving metropolitan base population in 1975 for measurement of 1970-75 migration was 2.1 times as large as the nonmetropolitan population. However, since gross metropolitan outmovement was just 1.3 times that of gross outflow from nonmetropolitan communities, the rate of metropolitan outmigration was lower than that from nonmetropolitan areas. Specifically, 6.7 million metropolitan outmovers from 1970-75 amounted to 5.5 percent of their base population, whereas the 5.1 million nonmetropolitan outmovers comprised 9.0 percent of their base. (US Bureau of the Census, 1975).

The only exception to this pattern was among people of retirement age (65 years and over), where the trend to live in smaller communities was sufficiently strong that the probability of an inter-residential move for a metropolitan resident was greater than that for a nonmetropolitan counterpart.

CONCLUSION

The early years of both the 1970s and the 1980s produced reversals in the United States in the patterns of metropolitan and nonmetropolitan population change. The events of the 1970s constitute a prime example of the inability of demographers to foresee an inflection point in the trend of population distribution. The "rural turnaround" was actively underway for at least three years before it became first reflected in either formal statistics or in anecdotal journalistic evidence. An initial reluctance to credit its reality was followed by a truly voluminous research literature of documentation and explanation (Fuguitt, 1985). Now we must ask whether the events of the 1970s

were an aberration. The trend of the early 1980s clearly requires that this possibility be considered. The economic circumstances that currently continue to affect adversely rural agriculture, mining, and manufacturing do not appear headed for early improvement.. It would seem difficult now for conditions in the last half of the decade to change sufficiently to produce any net immigration into nonmetropolitan areas for the decade as a whole. But even if the pattern of the 1970s proves to be unique in this century, it was of major dimensions and lasting impact. There are now some millions more people living in open country and small town communities than would be there had earlier trends continued unchanged.²

We reiterate that the recent slowing of nonmetropolitan growth nationally is quite real, but is not a return to the cityward outpouring of people observed in the generation after 1940. Even in the widely affected agricultural areas, the losses are more a slow bleeding than a demographic hemorrhage. Although a vigorous economic recovery in rural areas and small towns seems dubious in the near future, we regard as equally important the issue of the strength of social motivations to live in such areas. There seems no likelihood of average nonmetropolitan income levels fully reaching those in metropolitan areas, even if presumed but unmeasured cost of living differences are considered. A resumption of higher nonmetropolitan growth is probably dependent on the continued existence of a sizeable minority of metropolitan dwellers who perceive the quality of life satisfactions to be obtained by a migration to a rural or smaller community to be worth the income loss that many such migrants would experience. The strength of such perceptions was evidently strong in the decade of the 1970s, charged as that period was with the vigorous phase of the environmental movement and the somewhat anti-materialist flavor of the youth revolution. Residential

preferences are a subtle amalgam in their make up, and their strength is subject to change. Whether the preferences on which migrants to nonmetropolitan areas acted in the 1970s have retained their importance in the 1980s is not, we think, definitively knowable. But there are suggestions in the record of the decade thus far that they have weakened.

FOOTNOTES

¹ The annualized rates are based on the formula $[\ln(P_n/P_o)/n]*1000$, where P_n and P_o are the populations at the end and beginning of the periods, respectively, and n is the length of the interval in years (for 1960-70 and 1970-80 $N=10$; for 1980-83 $N=3.25$). By using 1000 as the multiplier, rates for interdecade growth approximate but--due to the effect of compounding--are slightly smaller in size than the simple percentage change. By comparison, for 1980-83 results approximate what would have been obtained had we used the 1980-83 annualized rate (without a multiplier) to project a 1990 population using $P_9 = P_8[1+r]^{10}$, and then calculated a 1980-1990 percent change.

² In counties classed as nonmetropolitan in this paper (1983 designation), the population would have been 5.6 million less than reported in 1980 had the 1960-70 growth continued over 1970-80. On the other hand, had the 1970-80 growth continued into the 1980s, the 1983 population of these counties would have been almost one million greater than estimated.

REFERENCES

- Economic Research Service. 1984. Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics 1983. United States Department of Agriculture, Economic Research Service, ECIFS3-3.
- Fuguitt, Glenn V. 1985. "The Nonmetropolitan Population Turnaround." Annual Review of Sociology 11:259-280.
- Richter, Kerry. 1985. "Nonmetropolitan Growth in the Late 1970s: the End of the Turnaround"? Demography 22:245-263.
- U.S. Bureau of the Census. 1975. "Mobility of the Population of the United States, March 1970 to March 1975." Current Population Reports, Series P-20, No. 285. Washington, DC: U.S. Government Printing Office.

1564N

12/85

Table 1. Metropolitan and Nonmetropolitan Population Change in the United States 1960-1983 (a)

	No of Counties	Population (000s)				Percent Change		
		1960	1970	1980	1983	1960-70	1970-80	1980-1983
Metropolitan	714	132,914	155,717	172,117	178,065	17.2	10.5	3.5
Nonmetropolitan	2374	46,413	47,585	54,429	55,917	2.5	14.4	2.7
TOTAL	3088	179,327	203,302	226,546	233,982	13.4	11.4	3.3

(a) Metropolitan Areas as defined in 1983.

Table 2 Metropolitan and Nonmetropolitan Annualized Population Change per 1000,
Regions of the United States 1960-1983

	Northeast	North Central	South	West	United States
<u>1960-70</u>					
Metropolitan	9.9	12.4	20.0	25.1	16.1
Nonmetropolitan	5.2	1.7	1.3	7.0	2.5
Total	9.4	9.2	13.5	21.9	12.7
<u>1970-80</u>					
Metropolitan	-0.9	2.7	19.8	20.5	10.1
Nonmetropolitan	9.4	7.2	15.4	26.8	13.5
Total	0.2	4.0	18.4	21.6	10.9
<u>1980-83</u>					
Metropolitan	2.1	0.5	19.1	19.1	10.5
Nonmetropolitan	4.4	0.4	11.1	20.2	8.3
Total	2.4	0.5	16.6	19.3	9.9

Table 3. Counties Grouped by Growth or Decline in 1970-80, 1980-83
and Metropolitan or Nonmetropolitan States in 1983

	Losing Population			Gaining Population		
	Total	Metro	Nonmetro	Total	Metro	Nonmetro
<u>1980-83</u>						
No. Counties	855	132	723	2233	582	1651
Ann.Pop.Change per 1000, 1980-83	-4.4	-4.2	-4.9	14.5	14.9	13.3
Percent of 1980 Pop. in Residence Group	24.8	23.8	28.0	75.2	76.2	72.0
Avg.County Size 1980 (000s)	65.7	310.7	21.1	76.3	225.3	23.7
<u>1970-80</u>						
No. Counties	545	84	461	2543	630	1913
Ann.Pop.Change per 1000, 1970-80	-7.3	-7.5	-5.0	17.4	18.1	15.8
Percent of 1970 Pop. in Residence Group	29.3	34.3	12.5	70.7	65.6	87.5
Avg.Co. Size 1970 (000s)	109.1	637.2	12.9	56.6	162.2	21.8
<u>New Loser or Gainer in 1980-83</u>						
	(Lost 1980-83 but gained 1970-80)			(Gained 1980-83 but lost 1970-80)		
No. Counties	537	82	455	227	34	193
Ann.Pop.Change per 1000, 1980-83	-4.2	-4.0	-4.4	3.3	2.8	7.9
Percent of 1980 Pop. in Residence Group	10.7	7.3	21.5	10.3	12.3	3.9
Avg.County Size 1980 (000s)	45.1	152.5	25.8	102.6	621.8	11.1

Table 4: Annualized Population Change per 1000 for Retirement and Other
Nonmetropolitan Counties

Type of County	No. of Counties	Population (0005)			Annualized Change	
		1970	1980	1983	1970-80	1980-83
Retirement	481	8767	11634	12346	28.3	18.3
Other	1893	38819	42794	43570	9.7	5.5
All Nonmetropolitan	2374	47586	54428	55916	13.5	8.3

Table 5: Annualized Population Change per 1000,
by Size of SMSA and Region, United States 1960-1983

Size of SMSA	Northeast	North Central	South	West	Total
<u>1960-70</u>					
1+ Mill. Core	2.4	5.5	21.5	20.0	10.9
1+ Mill. Fringe	21.2	26.8	37.8	47.7	27.9
250,000-999,999	11.0	12.5	15.3	24.3	14.6
LT 250,000	8.1	11.9	14.2	20.3	13.7
Nonmetro	5.2	1.7	1.3	7.0	2.5
<u>1970-80</u>					
1+ Mill. Core	-9.4	-7.3	16.8	13.7	2.5
1+ Mill. Fringe	4.5	15.1	27.1	29.3	16.2
250,000-999,999	4.5	3.8	18.9	25.9	13.0
LT 250,000	5.2	6.9	19.6	32.8	16.4
Nonmetro	9.4	7.2	15.4	26.8	13.5
<u>1980-83</u>					
1+ Mill. Core	-1.1	-2.1	21.5	17.5	8.9
1+ Mill. Fringe	5.0	5.0	24.1	21.3	12.2
250,000-999,999	3.5	-0.4	16.2	21.4	10.7
LT 250,000	1.5	0.5	17.6	19.5	11.6
Nonmetro	4.4	0.4	11.1	20.2	8.3

Table 6. Metropolitan-Nonmetropolitan Migration Streams, United States, 1970-1984

Period	Interval Years	All Ages (a)			Aged 20-29		
		Metro to Nonmetro (000)	Nonmetro to Metro (000)	Net to Nonmetro (000)	Metro to Nonmetro (000)	Nonmetro to Metro (000)	Net to Nonmetro (000)
1970-73	3	4680	3736	944	1332	1415	-83
1970-74	4	5965	4121	1844	1549	1614	-65
1970-75	5	6721	5127	1594	1723	2058	-335
1975-76	1	2477	2081	396	846	811	35
1975-77	2	3805	3202	603	1285	1241	44
1975-78	3	5321	4220	1101	1615	1581	34
1975-79	4	6691	5171	1520	1882	2061	-179
1975-80	5	7337	5993	1344	1781	2423	-642
1980-81	1	2350	2156	194	791	843	-52
1981-82	1	2366	2217	149	850	893	-43
1982-83	1	2066	2088	-22	721	867	-146
1983-84	1	2258	2609	-351	725	990	-265

(a) Aged 5 and over for 1970-75 and 1975-80; aged 4 and over for 1970-74 and 1975-79; aged 3 and over for 1970-73 and 1975-78; aged 1 and over for 1975-76, 1980-81, 1981-82, 1982-83, 1983-84.

Source: U.S. Bureau of the Census, Current Population Reports, Series P-20, Nos. 262, 273, 285, 305, 320, 331, 353, 368, 377, 384, 393. Geographical Mobility, U.S. Government Printing Office, Washington, D.C. 1974-.

FIGURE 1. METROPOLITAN AND NONMETROPOLITAN
ANNUALIZED POPULATION CHANGE PER 1000,
UNITED STATES 1960-1983

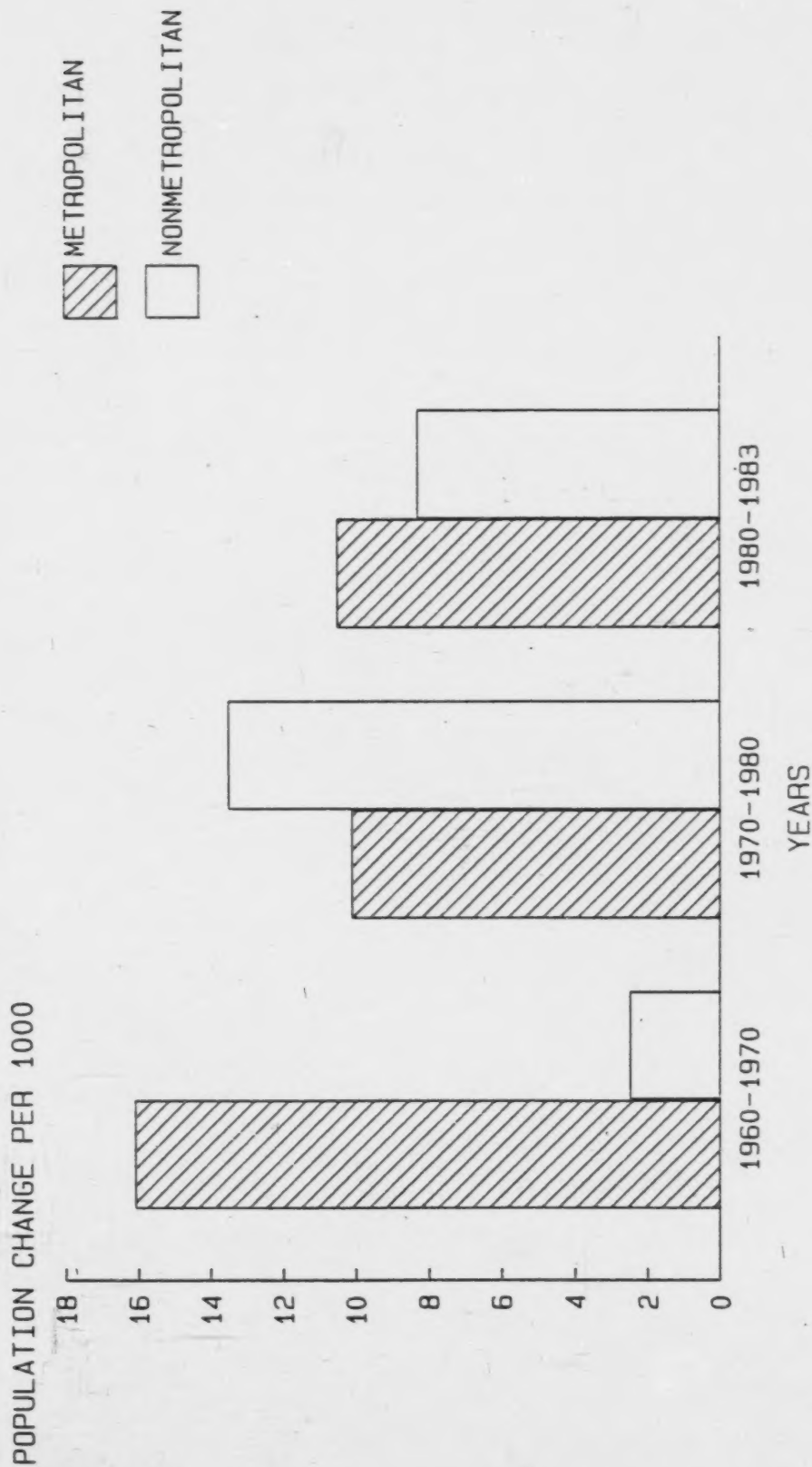
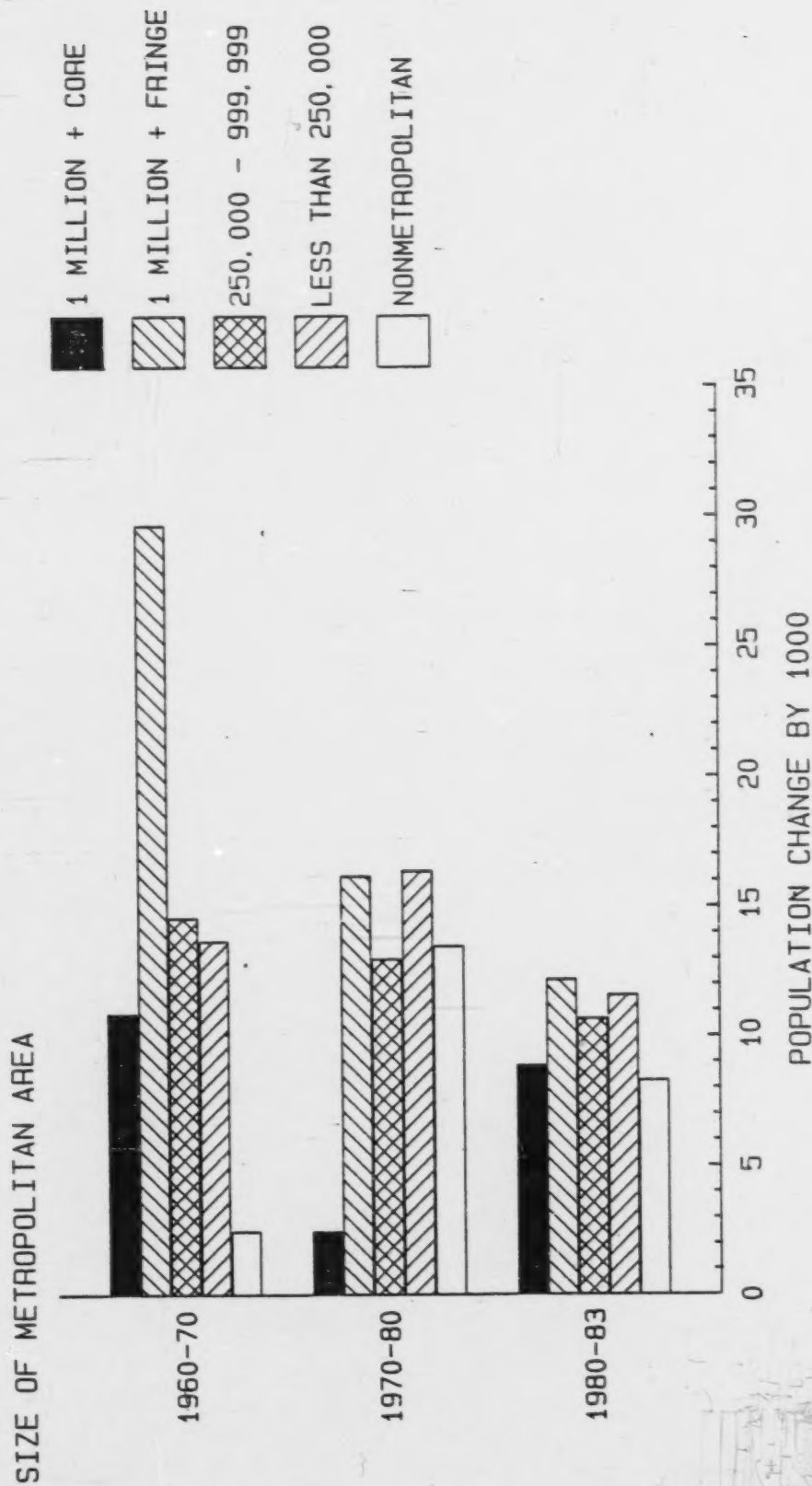
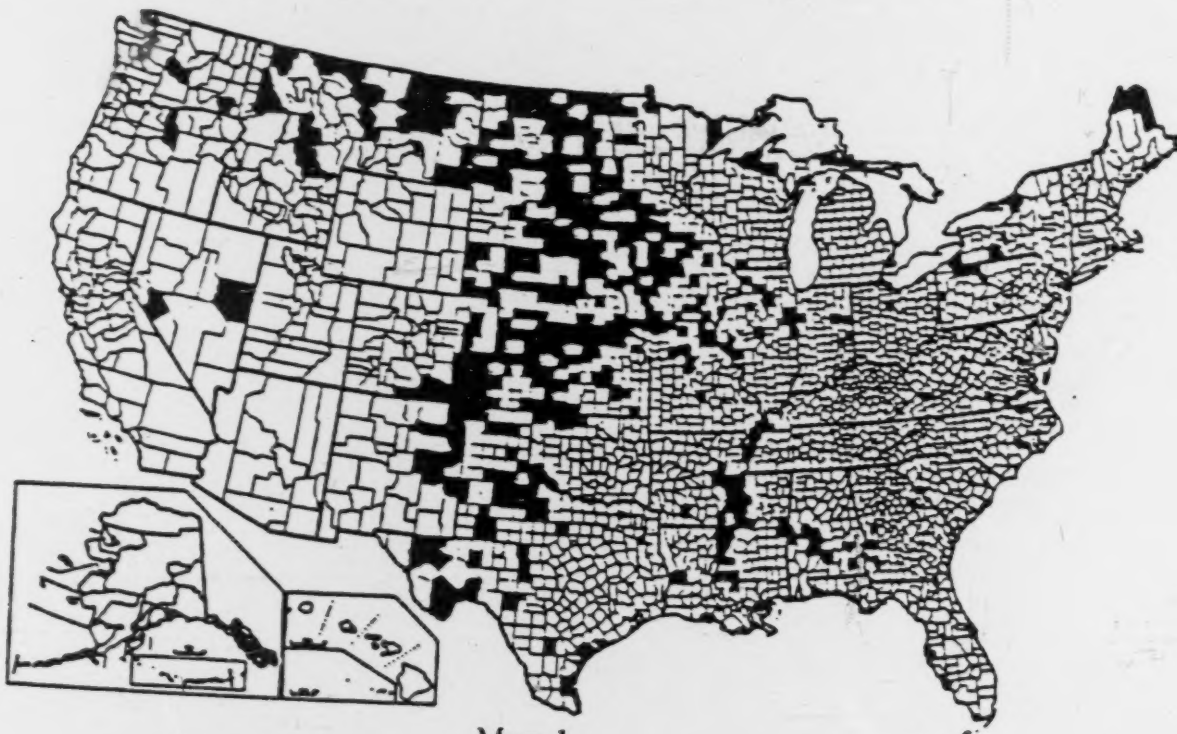


FIGURE 2. ANNUALIZED POPULATION CHANGE PER
1000 BY SIZE OF SMSA IN 1983, 1960-1983

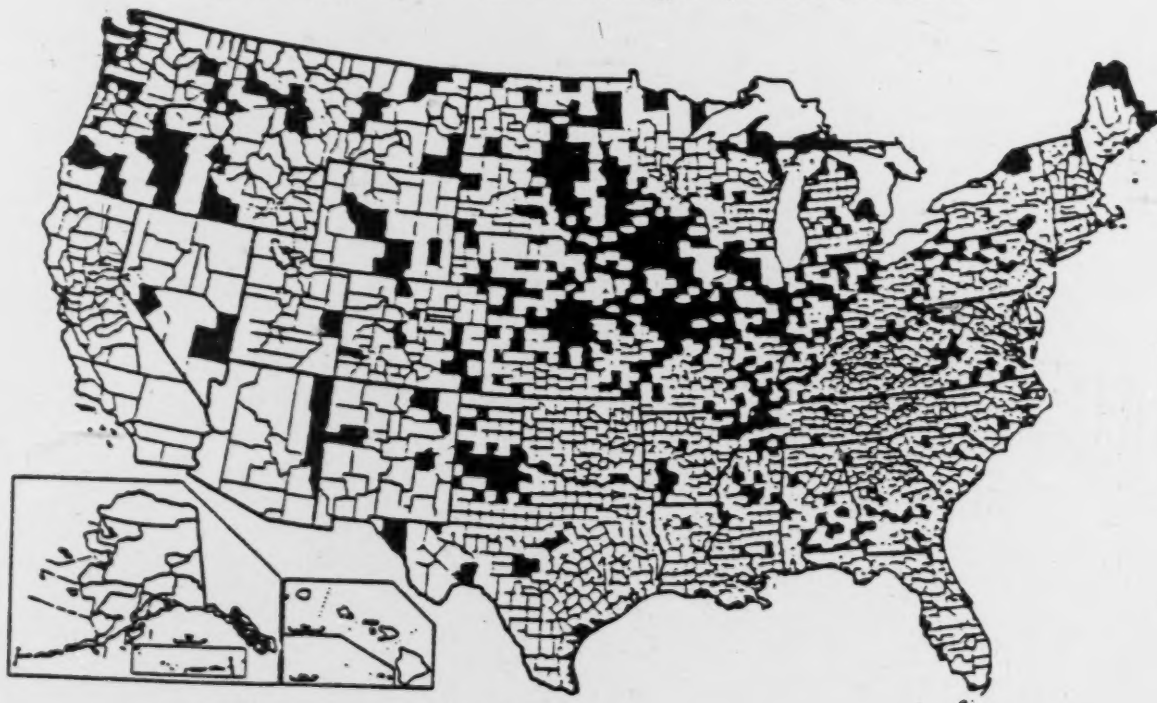


Nonmetro Counties With Declining Population, 1970-80



Map 1

Nonmetro Counties With Declining Population, 1980-83



Map 2

Prepared by Planning Section
Economic Research Service, USDA

Source: U.S. Bureau of Economic Census